

370	375	380
Leu Gly Trp Val Ser Pro Val Ser Asp Gly His Arg Gly Asp Val Asp		
385	390	395 400
Pro Trp Val Ile Pro Arg Tyr Gly Ser Thr Leu Thr Glu Ala Ala Gln		
405	410	415
Leu Ala Pro Pro Ile Tyr Pro Pro Gly Phe Gly Glu Ala Ile Val Phe		
420	425	430
Phe Met Ser Asp Phe Pro Ile Ala His Gly Thr Asn Gly Leu Ser Val		
435	440	445
Pro Cys Thr Ile Pro Gln Glu Phe Val Thr His Phe Val Asn Glu Gln		
450	455	460
Ala Pro Thr Arg Gly Glu Ala Ala Leu Leu His Tyr Leu Asp Pro Asp		
465	470	475 480
Thr His Arg Asn Leu Gly Glu Phe Lys Leu Tyr Pro Glu Gly Phe Met		
485	490	495
Thr Cys Val Pro Asn Ser Ser Gly Thr Gly Pro Gln Thr Leu Pro Ile		
500	505	510
Asn Gly Val Phe Val Phe Val Ser Trp Val Ser Arg Phe Tyr Gln Leu		
515	520	525
Lys Pro Val Gly Thr Ala Gly Pro Ala Cys Arg Leu Gly Ile Arg Arg		
530	535	540
Ser		
545		

<210> 2
 <211> 530
 <212> PRT
 <213> Hu/NLV/Seto 124/1989/JP

<400> 2
 Met Met Met Ala Ser Lys Asp Ala Thr Ser Ser Val Asp Gly Ala Ser
 1 5 10 15

Gly Ala Gly Gln Leu Val Pro Glu Val Asn Ala Ser Asp Pro Leu Ala

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2
--	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	---

4/38

Asp Gly Arg Leu Val Gly Thr Thr Pro Val Ser Leu Ser His Val Ala
 275 280 285
 Lys Ile Arg Gly Thr Ser Asn Gly Thr Val Ile Asn Leu Thr Glu Leu
 290 295 300
 Asp Gly Thr Pro Phe His Pro Phe Glu Gly Pro Ala Pro Ile Gly Phe
 305 310 315 320
 Pro Asp Leu Gly Gly Cys Asp Trp His Ile Asn Met Thr Gln Phe Gly
 325 330 335
 His Ser Ser Gln Thr Gln Tyr Asp Val Asp Thr Thr Pro Asp Thr Phe
 340 345 350
 Val Pro His Leu Gly Ser Ile Gln Ala Asn Gly Ile Gly Ser Gly Asn
 355 360 365
 Tyr Ile Gly Val Leu Ser Trp Val Ser Pro Pro Ser His Pro Ser Gly
 370 375 380
 Ser Gln Val Asp Leu Trp Lys Ile Pro Asn Tyr Gly Ser Ser Ile Thr
 385 390 395 400
 Glu Ala Thr His Leu Ala Pro Ser Val Tyr Pro Pro Gly Phe Gly Glu
 405 410 415
 Val Leu Val Phe Phe Met Ser Lys Ile Pro Gly Pro Gly Ala Tyr Ser
 420 425 430
 Leu Pro Cys Leu Leu Pro Gln Glu Tyr Ile Ser His Leu Ala Ser Glu
 435 440 445
 Gln Ala Pro Thr Val Gly Glu Ala Ala Leu Leu His Tyr Val Asp Pro
 450 455 460
 Asp Thr Gly Arg Thr Leu Gly Glu Phe Lys Ala Tyr Pro Asp Gly Phe
 465 470 475 480
 Leu Thr Cys Val Pro Asn Gly Ala Ser Ser Gly Pro Gln Gln Leu Pro
 485 490 495
 Ile Asn Gly Val Phe Val Phe Val Ser Trp Val Ser Arg Phe Tyr Gln
 500 505 510

Leu Lys Pro Val Gly Thr Ala Ser Ser Ala Arg Gly Arg Leu Gly Leu
 515 520 525

Arg Arg
 530

<210> 3
 <211> 545
 <212> PRT
 <213> Hu/NLV/Funabashi 258/1996/JP

<400> 3
 Met Met Met Ala Ser Lys Asp Ala Pro Gln Ser Ala Asp Gly Ala Ser
 1 5 10 15

Gly Ala Gly Gln Leu Val Pro Glu Val Asn Thr Ala Asp Pro Leu Pro
 20 25 30

Met Glu Pro Val Ala Gly Pro Thr Thr Ala Val Ala Thr Ala Gly Gln
 35 40 45

Val Asn Met Ile Asp Pro Trp Ile Val Asn Asn Phe Val Gln Ser Pro
 50 55 60

Gln Gly Glu Phe Thr Ile Ser Pro Asn Asn Thr Pro Gly Asp Ile Leu
 65 70 75 80

Phe Asp Leu Gln Leu Gly Pro His Leu Asn Pro Phe Leu Ser His Leu
 85 90 95

Ser Gln Met Tyr Asn Gly Trp Val Gly Asn Met Arg Val Arg Ile Leu
 100 105 110

Leu Ala Gly Asn Ala Phe Ser Ala Gly Lys Ile Ile Val Cys Cys Val
 115 120 125

Pro Pro Gly Phe Thr Ser Ser Ser Leu Thr Ile Ala Gln Ala Thr Leu
 130 135 140

Phe Pro His Val Ile Ala Asp Val Arg Thr Leu Glu Pro Ile Glu Met
 145 150 155 160

Pro Leu Glu Asp Val Arg Asn Val Leu Tyr His Thr Asn Asp Asn Gln
 165 170 175

090909.42001

Pro Thr Met Arg Leu Val Cys Met Leu Tyr Thr Pro Leu Arg Thr Gly
180 185 190

Gly Gly Ser Gly Asn Ser Asp Ser Phe Val Val Ala Gly Arg Val Leu
195 200 205

Thr Ala Pro Ser Ser Asp Phe Ser Phe Leu Phe Leu Val Pro Pro Thr
210 215 220

Ile Glu Gln Lys Thr Arg Ala Phe Thr Val Pro Asn Ile Pro Leu Gln
225 230 235 240

Thr Leu Ser Asn Ser Arg Phe Pro Ser Leu Ile Gln Gly Met Ile Leu
245 250 255

Ser Pro Asp Ala Ser Gln Val Val Gln Phe Gln Asn Gly Arg Cys Leu
260 265 270

Ile Asp Gly Gln Leu Leu Gly Thr Thr Pro Ala Thr Ser Gly Gln Leu
275 280 285

Phe Arg Val Arg Gly Lys Ile Asn Gln Gly Ala Arg Thr Leu Asn Leu
290 295 300

Thr Glu Val Asp Gly Lys Pro Phe Met Ala Phe Asp Ser Pro Ala Pro
305 310 315 320

Val Gly Phe Pro Asp Phe Gly Lys Cys Asp Trp His Met Arg Ile Ser
325 330 335

Lys Thr Pro Asn Asn Thr Ser Ser Gly Asp Pro Met Arg Ser Val Ser
340 345 350

Val Gln Thr Asn Val Gln Gly Phe Val Pro His Leu Gly Ser Ile Gln
355 360 365

Phe Asp Glu Val Phe Asn His Pro Thr Gly Asp Tyr Ile Gly Thr Ile
370 375 380

Glu Trp Ile Ser Gln Pro Ser Thr Pro Pro Gly Thr Asp Ile Asn Leu
385 390 395 400

Trp Glu Ile Pro Asp Tyr Gly Ser Ser Leu Ser Gln Ala Ala Asn Leu
405 410 415

Ala Pro Pro Val Phe Pro Pro Gly Phe Gly Glu Ala Leu Val Tyr Phe

420 425 430
Val Ser Ala Phe Pro Gly Pro Asn Asn Arg Ser Ala Pro Asn Asp Val
435 440 445
Pro Cys Leu Leu Pro Gln Glu Tyr Ile Thr His Phe Val Ser Glu Gln
450 455 460
Ala Pro Thr Met Gly Asp Ala Ala Leu Leu His Tyr Val Asp Pro Asp
465 470 475 480
Thr Asn Arg Asn Leu Gly Glu Phe Lys Leu Tyr Pro Gly Gly Tyr Leu
485 490 495
Thr Cys Val Pro Asn Gly Val Gly Ala Gly Pro Gln Gln Leu Pro Leu
500 505 510
Asn Gly Val Phe Leu Phe Val Ser Trp Val Ser Arg Phe Tyr Gln Leu
515 520 525
Lys Pro Val Gly Thr Ala Ser Thr Ala Arg Ser Arg Leu Gly Val Arg
530 535 540
Arg Ile
545

<210> 4
<211> 544
<212> PRT
<213> Hu/NLV/Chiba 407/1987/JP

<400> 4
Met Met Met Ala Ser Lys Asp Ala Thr Pro Ser Ala Asp Gly Ala Thr
1 5 10 15
Gly Ala Gly Gln Leu Val Pro Glu Val Asn Thr Ala Asp Pro Ile Pro
20 25 30
Ile Asp Pro Val Ala Gly Ser Ser Thr Ala Leu Ala Thr Ala Gly Gln
35 40 45
Val Asn Leu Ile Asp Pro Trp Ile Ile Asn Asn Phe Val Gln Ala Pro
50 55 60
Gln Gly Glu Phe Thr Ile Ser Pro Asn Asn Thr Pro Gly Asp Val Leu

66252663

65		70		75		80
Phe Asp Leu Gln Leu Gly Pro His Leu Asn Pro Phe Leu Ser His Leu						
	85			90		95
Ser Gln Met Tyr Asn Gly Trp Val Gly Asn Met Arg Val Arg Val Val						
	100			105		110
Leu Ala Gly Asn Ala Phe Thr Ala Gly Lys Val Ile Ile Cys Cys Val						
	115			120		125
Pro Pro Gly Phe Gln Ser Arg Thr Leu Ser Ile Ala Gln Ala Thr Leu						
	130			135		140
Phe Pro His Val Ile Ala Asp Val Arg Thr Leu Asp Pro Val Glu Val						
	145			150		155
Pro Leu Glu Asp Val Arg Asn Val Leu Tyr His Asn Asn Asp Thr Gln						
	165			170		175
Pro Thr Met Arg Leu Leu Cys Met Leu Tyr Thr Pro Leu Arg Thr Gly						
	180			185		190
Gly Ala Ser Gly Gly Thr Asp Ser Phe Val Val Ala Gly Arg Val Leu						
	195			200		205
Thr Cys Pro Gly Pro Asp Phe Asn Phe Leu Phe Leu Val Pro Pro Thr						
	210			215		220
Val Glu Gln Lys Thr Arg Pro Phe Thr Val Pro Asp Ile Pro Leu Lys						
	225			230		235
Tyr Leu Ser Asn Ser Arg Ile Pro Asn Pro Ile Glu Gly Met Ser Leu						
	245			250		255
Ser Pro Asp Gln Thr Gln Asn Val Gln Phe Gln Asn Gly Arg Cys Thr						
	260			265		270
Ile Asp Gly Gln Pro Leu Gly Thr Thr Pro Val Ser Val Ser Gln Leu						
	275			280		285
Cys Lys Phe Arg Gly Arg Ile Thr Ser Gly Gln Arg Val Leu Asn Leu						
	290			295		300
Thr Glu Leu Asp Gly Ser Pro Phe Met Ala Phe Ala Ala Pro Ala Pro						
	305			310		315
						320

000227 5523660

Ala Gly Phe Pro Asp Leu Gly Ser Cys Asp Trp His Ile Glu Met Ser
325 330 335

Lys Ile Pro Asn Ser Ser Thr Gln Asn Asn Pro Ile Val Thr Asn Ser
340 345 350

Val Lys Pro Asn Ser Gln Gln Phe Val Pro His Leu Ser Ser Ile Thr
355 360 365

Leu Asp Glu Asn Val Ser Ser Gly Gly Asp Tyr Ile Gly Thr Ile Gln
370 375 380

Trp Thr Ser Pro Pro Ser Asp Ser Gly Gly Ala Asn Thr Asn Phe Trp
385 390 395 400

Lys Ile Pro Asp Tyr Gly Ser Ser Leu Ala Glu Ala Ser Gln Leu Ala
405 410 415

Pro Ala Val Tyr Pro Pro Gly Phe Asn Glu Val Ile Val Tyr Phe Met
420 425 430

Ala Ser Ile Pro Gly Pro Asn Gln Ser Gly Ser Pro Asn Leu Val Pro
435 440 445

Cys Leu Leu Pro Gln Glu Tyr Ile Thr His Phe Ile Ser Glu Gln Ala
450 455 460

Pro Ile Gln Gly Glu Ala Ala Leu Leu His Tyr Val Asp Pro Asp Thr
465 470 475 480

Asn Arg Asn Leu Gly Glu Phe Lys Leu Tyr Pro Gly Gly Tyr Leu Thr
485 490 495

Cys Val Pro Asn Ser Ser Ser Thr Gly Pro Gln Gln Leu Pro Leu Asp
500 505 510

Gly Val Phe Val Phe Ala Ser Trp Val Ser Arg Phe Tyr Gln Leu Lys
515 520 525

Pro Val Gly Thr Ala Gly Pro Ala Arg Gly Arg Leu Gly Val Arg Arg
530 535 540

<210> 5
<211> 539
<212> PRT
<213> Hu/NLV/Narita 104/1997/JP

<400> 5

Met Lys Met Ala Ser Asn Asp Ala Asn Pro Ser Asp Gly Ser Thr Ala
1 5 10 15
Asn Leu Val Pro Glu Val Asn Asn Glu Val Met Ala Leu Glu Pro Val
20 25 30
Val Gly Ala Ala Ile Ala Ala Pro Val Ala Gly Gln Gln Asn Val Ile
35 40 45
Asp Pro Trp Ile Arg Asn Asn Phe Val Gln Ala Pro Gly Gly Glu Phe
50 55 60
Thr Val Ser Pro Arg Asn Ala Pro Gly Glu Ile Leu Trp Ser Ala Pro
65 70 75 80
Leu Gly Pro Asp Leu Asn Pro Tyr Leu Ser His Leu Ala Arg Met Tyr
85 90 95
Asn Gly Tyr Ala Gly Gly Phe Glu Val Gln Val Ile Leu Ala Gly Asn
100 105 110
Ala Phe Thr Ala Gly Lys Ile Ile Phe Ala Ala Val Pro Pro Asn Phe
115 120 125
Pro Thr Glu Gly Leu Ser Pro Ser Gln Val Thr Met Phe Pro His Ile
130 135 140
Ile Val Asp Val Arg Gln Leu Glu Pro Val Leu Ile Pro Leu Pro Asp
145 150 155 160
Val Arg Asn Asn Phe Tyr His Tyr Asn Gln Ser Asn Asp Ser Thr Ile
165 170 175
Lys Leu Ile Ala Met Leu Tyr Thr Pro Leu Arg Ala Asn Asn Ala Gly
180 185 190
Asp Asp Val Phe Thr Val Ser Cys Arg Val Leu Thr Arg Pro Ser Pro
195 200 205

Asp Phe Asp Phe Ile Phe Leu Val Pro Pro Thr Val Glu Ser Arg Thr
210 215 220

Lys Pro Phe Thr Val Pro Ile Leu Thr Val Glu Glu Met Ser Asn Ser
225 230 235 240

Arg Phe Pro Ile Pro Leu Glu Lys Leu Tyr Thr Gly Pro Ser Ser Ala
245 250 255

Phe Val Val Gln Pro Gln Asn Gly Arg Cys Thr Thr Asp Gly Val Leu
260 265 270

Leu Gly Thr Thr Gln Leu Ser Ala Val Asn Ile Cys Thr Phe Arg Gly
275 280 285

Asp Val Thr His Ile Ala Gly Ser His Asp Tyr Thr Met Asn Leu Ala
290 295 300

Ser Gln Asn Trp Ser Asn Tyr Asp Pro Thr Glu Glu Ile Pro Ala Pro
305 310 315 320

Leu Gly Thr Pro Asp Phe Val Gly Lys Ile Gln Gly Met Leu Thr Gln
325 330 335

Thr Thr Arg Glu Asp Gly Ser Thr Arg Ala His Lys Ala Thr Val Ser
340 345 350

Thr Gly Ser Val His Phe Thr Pro Lys Leu Gly Ser Val Gln Tyr Thr
355 360 365

Thr Asp Thr Asn Asn Asp Phe Gln Thr Gly Gln Asn Thr Lys Phe Thr
370 375 380

Pro Val Gly Val Ile Gln Asp Gly Asn Asn His Gln Asn Glu Pro Gln
385 390 395 400

Gln Trp Val Leu Pro Asn Tyr Ser Gly Arg Thr Gly His Asn Val His
405 410 415

Leu Ala Pro Ala Val Ala Pro Thr Phe Pro Gly Glu Gln Leu Leu Phe
420 425 430

Phe Arg Ser Thr Met Pro Gly Cys Ser Gly Tyr Pro Asn Met Asn Leu
435 440 445

Asp Cys Leu Leu Pro Gln Glu Trp Val Gln His Phe Cys Gln Glu Ala

450 455 460

Ala Pro Ala Gln Ser Asp Val Ala Leu Leu Arg Phe Val Asn Pro Asp
465 470 475 480

Thr Gly Arg Val Leu Phe Glu Cys Lys Leu His Lys Ser Gly Tyr Val
485 490 495

Thr Val Ala His Thr Gly Pro His Asp Leu Val Ile Pro Pro Asn Gly
500 505 510

Tyr Phe Arg Phe Asp Ser Trp Val Asn Gln Phe Tyr Thr Leu Ala Pro
515 520 525

Met Gly Asn Gly Ala Gly Arg Arg Arg Ala Leu
530 535

<210> 6
<211> 548
<212> PRT
<213> Hu/NLV/Sanbu 809/1998/JP

<400> 6
Met Lys Met Ala Ser Asn Asp Ala Ala Pro Ser Asn Asp Gly Ala Ala
1 5 10 15

Gly Leu Val Pro Glu Ile Asn Asn Glu Ala Met Ala Leu Asp Pro Val
20 25 30

Ala Gly Ala Ala Ile Ala Ala Pro Leu Thr Gly Gln Gln Asn Ile Ile
35 40 45

Asp Pro Trp Ile Met Asn Asn Phe Val Gln Ala Pro Gly Gly Glu Phe
50 55 60

Thr Val Ser Pro Arg Asn Ser Pro Gly Glu Val Leu Leu Asn Leu Glu
65 70 75 80

Leu Gly Pro Glu Ile Asn Pro Tyr Leu Ala His Leu Ala Arg Met Tyr
85 90 95

Asn Gly Tyr Ala Gly Gly Phe Glu Val Gln Val Val Leu Ala Gly Asn
100 105 110

Ala Phe Thr Ala Gly Lys Ile Ile Phe Ala Ala Ile Pro Pro Asn Phe

115	120	125
Pro Ile Asp Asn Leu Ser Ala Ala Gln Ile Thr Met Cys Pro His Val		
130	135	140
Ile Val Asp Val Arg Gln Leu Glu Pro Val Asn Leu Pro Met Pro Asp		
145	150	155 160
Val Arg Asn Asn Phe Phe His Tyr Asn Gln Gly Ser Asp Ser Arg Leu		
	165	170 175
Arg Leu Ile Ala Met Leu Tyr Thr Pro Leu Arg Ala Asn Asn Ser Gly		
	180	185 190
Asp Asp Val Phe Thr Val Ser Cys Arg Val Leu Thr Arg Pro Ser Pro		
	195	200 205
Asp Phe Ser Phe Asn Phe Leu Val Pro Pro Thr Val Glu Ser Lys Thr		
	210	215 220
Lys Pro Phe Thr Leu Pro Ile Leu Thr Ile Ser Glu Met Ser Asn Ser		
	225	230 235 240
Arg Phe Pro Val Pro Ile Glu Ser Leu His Thr Ser Pro Thr Glu Asn		
	245	250 255
Ile Val Val Gln Cys Gln Asn Gly Arg Val Thr Leu Asp Gly Glu Leu		
	260	265 270
Met Gly Thr Thr Gln Leu Leu Pro Ser Gln Ile Cys Ala Phe Arg Gly		
	275	280 285
Val Leu Thr Arg Ser Thr Ser Arg Ala Ser Asp Gln Ala Asp Thr Ala		
	290	295 300
Thr Pro Arg Leu Phe Asn Tyr Tyr Trp His Val Gln Leu Asp Asn Leu		
	305	310 315 320
Asn Gly Thr Pro Tyr Asp Pro Ala Glu Asp Ile Pro Gly Pro Leu Gly		
	325	330 335
Thr Pro Asp Phe Arg Gly Lys Val Phe Gly Val Ala Ser Gln Arg Asn		
	340	345 350
Leu Asp Ser Thr Thr Arg Ala His Glu Ala Lys Val Asp Thr Thr Ala		
	355	360 365

Gly Arg Phe Thr Pro Lys Leu Gly Ser Leu Glu Ile Ser Thr Asp Ser
370 375 380

Asp Asp Phe Asp Gln Asn Gln Pro Thr Lys Phe Thr Pro Val Gly Ile
385 390 395 400

Gly Val Asp Asn Glu Ala Glu Phe Gln Gln Trp Ser Leu Pro Asp Tyr
405 410 415

Ser Gly Gln Phe Thr His Asn Met Asn Leu Ala Pro Ala Val Ala Pro
420 425 430

Asn Phe Pro Gly Glu Gln Leu Leu Phe Phe Arg Ser Gln Leu Pro Ser
435 440 445

Ser Gly Gly Arg Ser Asn Gly Val Leu Asp Cys Leu Val Pro Gln Glu
450 455 460

Trp Val Gln His Phe Tyr Gln Glu Ser Ala Pro Ala Gln Thr Gln Val
465 470 475 480

Ala Leu Val Arg Tyr Val Asn Pro Asp Thr Gly Lys Val Leu Phe Glu
485 490 495

Ala Lys Leu His Lys Leu Gly Phe Met Thr Ile Ala Asn Asn Gly Asp
500 505 510

Ser Pro Ile Thr Val Pro Pro Asn Gly Tyr Phe Arg Phe Glu Ser Trp
515 520 525

Val Asn Pro Phe Tyr Thr Leu Ala Pro Met Gly Thr Gly Asn Gly Arg
530 535 540

Arg Arg Ile Gln
545

<210> 7

<211> 540

<212> PRT

<213> Hu/NLV/Ichikawa 754/1998/JP

<400> 7

Met Lys Met Ala Ser Asn Asp Ala Thr Pro Ser Asn Asp Gly Ala Ala
1 5 10 15

Gly Leu Val Pro Glu Ser Asn Asn Glu Ala Met Ala Leu Glu Pro Val
20 25 30

Val Gly Ala Ser Leu Ala Ala Pro Val Thr Gly Gln Thr Asn Ile Ile
35 40 45

Asp Pro Trp Ile Arg Thr Asn Phe Val Gln Ala Pro Asn Gly Glu Phe
50 55 60

Thr Val Ser Pro Arg Asn Ser Pro Gly Glu Ile Leu Val Asn Leu Glu
65 70 75 80

Leu Gly Pro Glu Leu Asn Pro Tyr Leu Ala His Leu Ala Arg Met Tyr
85 90 95

Asn Gly Tyr Ala Gly Gly Met Glu Val Gln Val Met Leu Ala Gly Asn
100 105 110

Ala Phe Thr Ala Gly Lys Ile Ile Phe Ala Ala Val Pro Pro Tyr Phe
115 120 125

Pro Val Glu Asn Leu Ser Pro Ser Gln Ile Thr Met Phe Pro His Val
130 135 140

Ile Ile Asp Val Arg Thr Leu Glu Pro Val Leu Leu Pro Met Pro Asp
145 150 155 160

Val Arg Ser Thr Leu Phe His Phe Asn Gln Lys Asp Glu Pro Lys Met
165 170 175

Arg Leu Val Ala Met Leu Tyr Thr Pro Leu Arg Ser Asn Gly Ser Gly
180 185 190

Asp Asp Val Phe Thr Val Ser Cys Arg Ile Leu Thr Arg Pro Ser Pro
195 200 205

Glu Phe Asp Phe Thr Tyr Leu Val Pro Pro Thr Val Glu Ser Lys Thr
210 215 220

Lys Pro Phe Thr Leu Pro Val Leu Thr Leu Gly Glu Leu Ser Asn Ser
225 230 235 240

Arg Phe Pro Leu Ser Ile Asp Glu Met Val Thr Ser Pro Asn Glu Ser
245 250 255

Ile Val Val Gln Pro Gln Asn Gly Arg Val Thr Leu Asp Gly Glu Leu
260 265 270

Leu Gly Thr Thr Gln Leu Gln Ala Cys Asn Ile Cys Ser Ile Arg Gly
275 280 285

Lys Val Thr Gly Gln Val Pro Ser Glu Gln His Met Trp Asn Leu Glu
290 295 300

Ile Thr Asn Leu Asn Gly Thr Gln Phe Asp Pro Thr Asp Asp Val Pro
305 310 315 320

Ala Pro Leu Gly Val Pro Asp Phe Ala Gly Glu Val Phe Gly Val Leu
325 330 335

Ser Gln Arg Asn Arg Gly Glu Ser Asn Pro Ala Asn Arg Ala His Asp
340 345 350

Ala Val Val Ala Thr Tyr Ser Asp Lys Tyr Thr Pro Lys Leu Gly Leu
355 360 365

Val Gln Ile Gly Thr Trp Asn Thr Asn Asp Val Glu Asn Gln Pro Thr
370 375 380

Lys Phe Thr Pro Ile Gly Leu Asn Glu Val Ala Asn Gly His Arg Phe
385 390 395 400

Glu Gln Trp Thr Leu Pro Arg Tyr Ser Gly Ala Leu Thr Leu Asn Met
405 410 415

Asn Leu Ala Pro Ala Val Ala Pro Leu Phe Pro Gly Glu Arg Leu Leu
420 425 430

Phe Phe Arg Ser Tyr Val Pro Leu Lys Gly Gly Phe Gly Asn Pro Ala
435 440 445

Ile Asp Cys Ser Val Pro Gln Glu Trp Val Gln His Phe Tyr Gln Glu
450 455 460

Ser Ala Pro Ser Leu Gly Asp Val Ala Leu Val Arg Tyr Val Asn Pro
465 470 475 480

Asp Thr Gly Arg Val Leu Phe Glu Ala Lys Leu His Lys Gly Gly Phe
485 490 495

Leu Thr Val Ser Ser Thr Ser Thr Gly Pro Val Val Val Pro Ala Asn

500 505 510

Gly Tyr Phe Lys Phe Asp Ser Trp Val Asn Gln Phe Tyr Ser Leu Ala
515 520 525

Pro Met Gly Thr Gly Asn Gly Arg Arg Arg Val Gln
530 535 540

<210> 8
<211> 535
<212> PRT
<213> Hu/NLV/Chitta 1876/1996/JP

<400> 8

Met Lys Met Ala Ser Asn Asp Ala Ala Pro Ser Asn Asp Gly Ala Ala
1 5 10 15

Gly Leu Val Pro Glu Ala Asn Asn Glu Thr Met Ala Leu Glu Pro Val
20 25 30

Ala Gly Ala Ser Ile Ala Ala Pro Leu Thr Gly Gln Asn Asn Ile Ile
35 40 45

Asp Pro Trp Ile Arg Leu Asn Phe Val Gln Ala Pro Asn Gly Glu Phe
50 55 60

Thr Val Ser Pro Arg Asn Ser Pro Gly Glu Val Leu Leu Asn Leu Glu
65 70 75 80

Leu Gly Pro Glu Leu Asn Pro Tyr Leu Ala His Leu Ser Arg Met Tyr
85 90 95

Asn Gly Tyr Ala Gly Gly Val Glu Val Gln Val Leu Leu Ala Gly Asn
100 105 110

Ala Phe Thr Ala Gly Lys Leu Val Phe Ala Ala Val Pro Pro His Phe
115 120 125

Pro Leu Glu Asn Ile Ser Pro Gly Gln Ile Thr Met Phe Pro His Val
130 135 140

Ile Ile Asp Val Arg Thr Leu Glu Pro Val Leu Leu Pro Leu Pro Asp
145 150 155 160

Val Arg Asn Asn Phe Phe His Tyr Asn Gln Gln Asn Glu Pro Arg Met

Arg Leu Val Ala Met Leu Tyr Thr Pro Leu Arg Ser Asn Gly Ser Gly
180 185 190

Asp Asp Val Phe Thr Val Ser Cys Arg Val Leu Thr Arg Pro Ser Pro
195 200 205

Asp Phe Asp Phe Asn Tyr Leu Val Pro Pro Thr Leu Glu Ser Lys Thr
210 215 220

Lys Pro Phe Thr Leu Pro Ile Leu Thr Ile Gly Glu Leu Thr Asn Ser
225 230 235 240

Arg Phe Pro Val Pro Ile Asp Glu Leu Tyr Thr Ser Pro Asn Glu Ser
245 250 255

Leu Val Val Gln Pro Gln Asn Gly Arg Cys Ala Leu Asp Gly Gln Leu
260 265 270

Gln Gly Thr Thr Gln Leu Leu Pro Thr Ala Ile Cys Ser Phe Arg Gly
275 280 285

Arg Ile Asn Gln Lys Val Ser Gly Glu Asn His Val Trp Asn Met Gln
290 295 300

Val Thr Asn Ile Asn Gly Thr Pro Phe Asp Pro Thr Gly Asp Val Pro
305 310 315 320

Ala Pro Leu Gly Thr Pro Asp Phe Ser Gly Lys Leu Phe Gly Val Leu
325 330 335

Ser Gln Arg Asp His Asp Asn Ala Cys Arg Ser His Asp Ala Val Ile
340 345 350

Ala Thr Asn Ser Ala Lys Phe Thr Pro Lys Leu Gly Ala Ile Gln Ile
355 360 365

Gly Thr Trp Glu Glu Asp Asp Val His Ile Asn Gln Pro Thr Lys Phe
370 375 380

Thr Pro Val Gly Leu Phe Glu Asn Glu Gly Phe Asn Gln Trp Thr Leu
385 390 395 400

Pro Asn Tyr Ser Gly Ala Leu Thr Leu Asn Met Gly Leu Ala Pro Pro
405 410 415

Val Ala Pro Thr Phe Pro Gly Glu Gln Ile Leu Phe Phe Arg Ser His
420 425 430

Ile Pro Leu Lys Gly Gly Val Ala Asp Pro Val Ile Asp Cys Leu Leu
435 440 445

Pro Gln Glu Trp Ile Gln His Leu Tyr Gln Glu Ser Ala Pro Ser Glu
450 455 460

Ser Asp Val Ala Leu Ile Arg Phe Thr Asn Pro Asp Thr Gly Arg Val
465 470 475 480

Leu Phe Glu Ala Lys Leu His Arg Ser Gly Tyr Ile Thr Val Ala Asn
485 490 495

Thr Gly Ser Arg Pro Ile Val Val Pro Ala Asn Gly Tyr Phe Arg Phe
500 505 510

Asp Thr Trp Val Asn Gln Phe Tyr Ser Leu Ala Pro Met Gly Thr Gly
515 520 525

Asn Gly Arg Arg Arg Val Gln
530 535

<210> 9

<211> 542

<212> PRT

<213> Hu/NLV/Kashiwa 47/1997/JP

<400> 9

Met Lys Met Ala Ser Asn Asp Ala Ala Pro Ser Asn Asp Gly Ala Ala
1 5 10 15

Ser Leu Val Pro Glu Gly Ile Asn Gly Thr Met Pro Leu Glu Pro Val
20 25 30

Ala Gly Ala Ser Ile Ala Ala Pro Val Ala Gly Gln Thr Asn Ile Ile
35 40 45

Asp Pro Trp Ile Arg Thr Asn Phe Val Gln Ala Pro Asn Gly Glu Phe
50 55 60

Thr Val Ser Pro Arg Asn Ser Pro Gly Glu Ile Leu Leu Asn Leu Glu
65 70 75 80

Leu Gly Pro Asp Leu Asn Pro Tyr Leu Ala His Leu Ser Arg Met Tyr
85 90 95

Asn Gly Tyr Ala Gly Gly Val Glu Val Gln Val Leu Leu Ala Gly Asn
100 105 110

Ala Phe Thr Ala Gly Lys Ile Leu Phe Ala Ala Ile Pro Pro Asn Phe
115 120 125

Leu Val Asp Met Ile Ser Pro Ala Gln Ile Thr Met Leu Pro His Leu
130 135 140

Ile Val Asp Val Arg Thr Leu Glu Pro Ile Met Thr Pro Leu Pro Asp
145 150 155 160

Val Arg Asn Val Phe Tyr His Phe Asn Asn Gln Pro Gln Pro Arg Met
165 170 175

Arg Leu Val Ala Met Leu Tyr Thr Pro Leu Arg Ser Asn Gly Ser Gly
180 185 190

Asp Asp Val Phe Thr Val Ser Cys Arg Val Leu Thr Arg Pro Thr Pro
195 200 205

Asp Phe Glu Phe Ile Tyr Leu Val Pro Pro Ser Val Glu Ser Lys Thr
210 215 220

Lys Pro Phe Thr Leu Pro Ile Leu Thr Ile Ser Glu Leu Thr Asn Ser
225 230 235 240

Arg Phe Pro Ile Pro Ile Glu Gln Leu Tyr Thr Ala Pro Asn Glu Thr
245 250 255

Asn Val Val Gln Cys Gln Asn Gly Arg Cys Thr Leu Asp Gly Glu Leu
260 265 270

Gln Gly Thr Thr Gln Leu Leu Ser Ser Ala Val Cys Phe Leu Gln Gly
275 280 285

Arg Thr Val Ala Asp Asn Gly Asp Asn Trp Asp Gln Asn Leu Leu Gln
290 295 300

Leu Thr Tyr Pro Asn Gly Ala Ser Tyr Asp Pro Thr Asp Glu Val Pro
305 310 315 320

<213> Hu/NLV/Mie 7k/1994/JP

<400> 10

Met Lys Met Ala Ser Asn Asp Ala Ala Pro Ser Asn Asp Gly Ala Ala

1 5 10 15

Asn Leu Val Pro Glu Ala Asn Asp Glu Val Met Ala Leu Glu Pro Val

20 25 30

Val Gly Ala Ser Ile Ala Ala Pro Val Val Gly Gln Gln Asn Ile Ile

35 40 45

Asp Pro Trp Ile Arg Glu Asn Phe Val Gln Ala Pro Gln Gly Glu Phe

50 55 60

Thr Val Ser Pro Arg Asn Ser Pro Gly Glu Met Leu Leu Asn Leu Glu

65 70 75 80

Leu Gly Pro Glu Leu Asn Pro Tyr Leu Ser His Leu Ser Arg Met Tyr

85 90 95

Asn Gly Tyr Ala Gly Gly Met Gln Val Gln Val Val Leu Ala Gly Asn

100 105 110

Ala Phe Thr Ala Gly Lys Ile Ile Phe Ala Ala Val Pro Pro His Phe

115 120 125

Pro Val Glu Asn Ile Ser Ala Ala Gln Ile Thr Met Cys Pro His Val

130 135 140

Ile Val Asp Val Arg Gln Leu Glu Pro Val Leu Leu Pro Leu Pro Asp

145 150 155 160

Ile Arg Asn Arg Phe Phe His Tyr Asn Gln Glu Asn Thr Pro Arg Met

165 170 175

Arg Leu Val Ala Met Leu Tyr Thr Pro Leu Arg Ala Asn Ser Gly Glu

180 185 190

Asp Val Phe Thr Val Ser Cys Arg Val Leu Thr Arg Pro Ala Pro Asp

195 200 205

Phe Glu Phe Thr Phe Leu Val Pro Pro Thr Val Glu Ser Lys Thr Lys

210 215 220

Pro Phe Thr Leu Pro Ile Leu Thr Leu Gly Glu Leu Ser Asn Ser Arg

00227 66292550

225	230	235	240
Phe Pro Ala Ala Ile Asp Met Leu Tyr Thr Asp Pro Asn Glu Ser Ile			
245	250	255	
Val Val Gln Pro Gln Asn Gly Arg Cys Thr Leu Asp Gly Thr Leu Gln			
260	265	270	
Gly Thr Thr Gln Leu Val Pro Thr Gln Ile Cys Ala Phe Arg Gly Thr			
275	280	285	
Leu Ile Ser Gln Thr Ala Arg Ala Ala Asp Ser Thr Asp Ser Pro Gln			
290	295	300	
Arg Ala Arg Asn His Pro Leu His Val Gln Val Lys Asn Leu Asp Gly			
305	310	315	320
Thr Gln Tyr Asp Pro Thr Asp Asp Ile Pro Ala Val Leu Gly Ala Ile			
325	330	335	
Asp Phe Lys Gly Thr Val Phe Gly Val Ala Ser Gln Arg Asp Val Ser			
340	345	350	
Gly Gln Gln Glu Gln Gly His Tyr Ala Thr Arg Ala His Glu Ala His			
355	360	365	
Ile Asp Thr Thr Asp Pro Lys Tyr Ala Pro Lys Leu Gly Thr Ile Leu			
370	375	380	
Ile Lys Ser Gly Ser Asp Asp Phe Asn Thr Asn Gln Pro Ile Arg Phe			
385	390	395	400
Thr Pro Val Gly Met Gly Asp Asn Asn Trp Arg Gln Trp Glu Leu Pro			
405	410	415	
Asp Tyr Ser Gly Arg Leu Thr Leu Asn Met Asn Leu Ala Pro Ala Val			
420	425	430	
Ser Pro Ser Phe Pro Gly Glu Arg Ile Leu Phe Phe Arg Ser Ile Val			
435	440	445	
Pro Ser Ala Gly Gly Tyr Gly Ser Gly Tyr Ile Asp Cys Leu Ile Pro			
450	455	460	
Gln Glu Trp Val Gln His Phe Tyr Gln Glu Ala Ala Pro Ser Gln Ser			
465	470	475	480

Ala Val Ala Leu Val Arg Tyr Val Asn Pro Asp Thr Gly Arg Asn Ile
485 490 495

Phe Glu Ala Lys Leu His Arg Glu Gly Phe Leu Thr Val Ala Asn Cys
500 505 510

Gly Asn Asn Pro Ile Val Val Pro Pro Asn Gly Tyr Phe Arg Phe Glu
515 520 525

Ala Trp Gly Asn Gln Phe Tyr Thr Leu Ala Pro Met Gly Ser Gly Gln
530 535 540

Gly Arg Arg Arg Ala Gln
545 550

<210> 11

<211> 541

<212> PRT

<213> Hu/NLV/Osaka 10-25/1999/JP

<400> 11

Met Lys Met Ala Ser Asn Asp Ala Ala Pro Ser Ser Asp Gly Ala Ala
1 5 10 15

Gly Leu Val Pro Glu Ile Asn Asn Glu Val Met Pro Leu Glu Pro Val
20 25 30

Ala Gly Ala Ser Leu Ala Thr Pro Val Val Gly Gln Gln Asn Ile Ile
35 40 45

Asp Pro Trp Ile Arg Asn Asn Phe Val Gln Ala Pro Ala Gly Glu Phe
50 55 60

Thr Val Ser Pro Arg Asn Ser Pro Gly Glu Ile Leu Leu Asp Leu Glu
65 70 75 80

Leu Gly Pro Asp Leu Asn Pro Tyr Leu Ala His Leu Ala Arg Met Tyr
85 90 95

Asn Gly His Ala Gly Gly Met Glu Val Gln Ile Val Leu Ala Gly Asn
100 105 110

Ala Phe Thr Ala Gly Lys Ile Ile Phe Ala Ala Ile Pro Pro Gly Phe
115 120 125

Pro Tyr Glu Asn Leu Ser Pro Ser Gln Ile Thr Met Cys Pro His Val
130 135 140

Ile Ile Asp Val Arg Gln Leu Glu Pro Phe Leu Leu Pro Met Pro Asp
145 150 155 160

Ile Trp Asn Asn Phe Phe His Tyr Asn Gln Gly Asn Asp Pro Lys Leu
165 170 175

Arg Leu Val Ala Met Leu Tyr Thr Pro Leu Arg Ala Asn Asn Ser Gly
180 185 190

Asp Asp Val Phe Thr Val Ser Cys Arg Val Leu Thr Lys Pro Ser Pro
195 200 205

Asp Phe Glu Phe Thr Phe Leu Val Pro Pro Thr Val Glu Ser Lys/Thr
210 215 220

Lys Gln Phe Ala Leu Pro Ile Leu Lys Ile Ser Glu Met Thr Asn Ser
225 230 235 240

Arg Phe Pro Val Pro Val Asp Val Met Tyr Thr Ala Arg ~~Asn~~ Glu Asn
245 250 255

Gln Val Val Gln Pro Gln Asn Gly Arg Val Thr Leu Asp Gly Glu Leu
260 265 270

Leu Gly Thr Thr Pro Leu Leu Ala Val Asn Ile Cys Lys Phe Lys Gly
275 280 285

Glu Val Ile Ala Lys Asn Gly Asp Val Arg Ser/Tyr Arg Met Asp Met
290 295 300

Glu Ile Thr Asn Thr Asp Gly Thr Pro Ile / Asp Pro Thr Glu Asp Thr
305 310 / 315 320

Pro Gly Pro Ile Gly Ser Pro Asp Phe Gln Gly Ile Leu Phe Gly Val
325 330 335

Ala Ser Gln Arg Asn Lys Asn Glu Gln Asn Pro Ala Thr Arg Ala His
340 345 350

Glu Ala Ile Ile Asn Thr Gly Gly Asp His Leu Cys Pro Gln Ile Ser
355 260 365

Ser Ser Glu Ile Tyr Leu Thr Ser Pro Asn Ile Leu Arg Cys Thr Asn
370 375 380

Pro Gln Pro Leu Pro Gln Ser Gly Leu Arg Gly Thr Ile Leu Ile Arg
385 390 395 400

Ser Asp Asn Gly His Cys His Asp Met Val Gly Thr Ser Pro Thr Thr
405 410 415

Pro Thr Trp Pro Gln Gln Trp Arg Arg Cys Ser Arg Gly Ser Asn Cys
420 425 430

Cys Ser Ser Gly His Arg Tyr Pro Val Pro Val Val Met Asn Arg Val
435 440 445

Thr Trp Ile Val Leu Ser His Lys Ser Gly Phe Ser Thr Ser Thr Arg
450 455 460

Lys Leu Pro Gln Leu Asn Leu Arg Trp Pro Leu Ile Arg Phe Ile Asn
465 470 475 480

Pro Asp Thr Gly Arg Val Leu Phe Glu Ala Arg Leu His Lys Gln Gly
485 490 495

Phe Ile Thr Val Ala His Thr Gly Asp Asn Pro Ile Val Met Pro Pro
500 505 510

Asn Gly Tyr Phe Arg Phe Glu Ala Trp Val Asn Gln Phe Tyr Ser Leu
515 520 525

Ala Pro Val Gly Thr Gly Lys Gly Arg Arg Arg Val Gln
530 535 540

<210> 12

<211> 1638

<212> DNA

<213> Hu/NLV/Kashiwa 645/1999/JP

<400> 12

atgatgatgg cgtctaagga cgccccaaca aacatggatg gcaccagtgg tgcgggccag 60
ciggatccag aggcaaatac agctgagcca atatcaatgg agcctgiggc tggggcagca 120
acagctgccg caaccgctgg ccaagttaat atgattgacc cctggataat gaataattat 180
gtgcaagccc ctcaaggiga atttaccata tgccttaata acacaccagg tgataattttg 240
tttgatctac aattaggccc tcatctcaat cctttcttat cccatttggc ccaaattgat 300
aacggttggg ttggcaatat gaaagigaag gtccctattgg ciggtaatgc cttcacggct 360

```

ggtaaaataa tcattagtg catacccct ggcttltgt cgcaaaacat ttctatcgct 420
cagggccacaa tgttccccc cgtatagct galgttaggg ttttgaacc tatlgagggtg 480
ccattggaag atgtgaggaa tgtgtgttc cataacaatg acaacgcacc aacctgagg 540
ttgggtgca tgcctacac ccccttgcga gccagtgtga gctcatctgg aactgacct 600
tttggatgt cttgggtgt tctgacatgc ccaagccctg actttagctt ctattcttg 660
gttccccca atgtagagca aaagactaaa ccttttagtg tcccaaatct tccactgaat 720
acctttcaa attcaagagt ccttctcta attaaatcaa tgaatggtatc cagagacct 780
gggcagatgg ttcagttca aaacggtagg gtcacctgg atgggcaact gcaaggcacc 840
acggccacat cagctagcca gctgtgcaa atcagaggca gtgtcttcca tgcataatgg 900
gggaatggat ataacctaac tgaatggat gggagcccat accatgcttt tgagagccct 960
gcgccaatag ggtttcctga tctaggtgaa tgtgattggc acatggaggc ctccccctacc 1020
acccaattca atactggga tgtataaaa caaattaatg tcaacaaga atcagcattt 1080
gtccccacc ttggtaccat acaagcagat ggcttagtg atgtgagtgt caacactaac 1140
atgatagcca aattgggatg ggtgtcacc gtcagtgtg gatagagg agatgtcgat 1200
ccgtgggtca ttccacgata tgggtcagct ttgaccgagg ccggccaatt agcccccca 1260
atatatccc caggttttg tgaggccatt gtgttttca tgcagattt tctatagcc 1320
catggtacca atggcttgag tgtgcttgc accataccc aagaatttgt cccccattt 1380
gtcaatgaac agggccctac tagaggggaa gcagccctac tgcattattt agacctgat 1440
acccatagaa atcttggga gtttaatta taccctgagg ggttcatgac gtgtgtgct 1500
aatccagtg gcaatgtcc acaaacctc ccaatcaatg gtgttttgt tttgtgtcc 1560
tgggtttcca gattctatca gttaaagct gtgggaacag ccggccccgc ttgtaggctt 1620
ggcatcagaa gatcataa 1638

```

<210> 13

<211> 1593

<212> DNA

<213> Hu/NLV/Seto 124/1989/JP

<400> 13

```

atgatgatgg cgtctaagga cgtacgtca agcgtggatg gcgccagtgg cgttggtcag 60
ttgtaccgg aggttaatgc ttctgacct ctgtcaatgg atctgtggc ggttcttca 120
acagcagttg caactgtctg gcaagttaac cctattgacc ctgtgataat caataactt 180
gtgcaggctc cccaaggta atttactatt tctccaaata atacccccgg tgggttttg 240
tttgatttga gtctaggccc tcatctaat ccttcttgt tacattgtc acaaatgtat 300
aatggctggg ttggcaacat gagagttagg attatgtctg ctggtaatgc attactgca 360
ggcaaaatta tagtttcttg catacctcc ggcttggct ccataatct tactatagca 420
caagcaactc tcttccgca tgtattgtt gatgttagga cttagacct aattgaagta 480
cccttgggaag atgttaaggaa tgttctttt cataataatg atagaaatca acaaacctg 540
cgcttgtgt gtagcttta taccacctc cgcactggg gcggtacagg tgattcttt 600
glggttgcag ggcgagtcac gactgtctt agccccgatt tcaattctt gtcttgggt 660
cttccacag tgaacagaa gactagacct ttacacctc caaatttacc gctgagttct 720
ttgtcaaat cactgtctc tcttccaatt agtggcatgg glatttctc agacaalggt 780
cagagtgtgc agtttcaaaa tggccgaigt accttagacg ggcgtctgt tggtaaccac 840
ccagtttccc tcttccagc tgcataagata aggggcacti ctatgggtac tggatcaat 900
ctcaccgaat tggatggcac ccccttccac ccttttgaag gccctgcccc tattggttt 960

```

ccagatcttg gtggctgtga ttggcatatt aatatgacac aatttgggca ttccagtcag 1020
 actcaataig atgtagatac ccccccgac accttcgtcc ctacattagg ticaatccag 1080
 gcgaatggca ttggtagigg caactatatt gggttcttla gctgggtctc cccccatca 1140
 catccatctg gctctcaagt tgaictctgg aagatcccca aciatgggtc tagcatcaca 1200
 gaggcaaccc atctagctcc ctctgctat cctccctggct ttggagaggt gttagtcitt 1260
 ttcatgtcaa agataacctg tccctggctt tatagctctg cctgtttact gccacaagaa 1320
 tatactctac acctcgcaag tgaacaagcc cccactgttg gtgaggccgc ctgtctccac 1380
 tatgttgacc ctgacacggg ccggactctt ggggagttta aggcttacc tgatggtttc 1440
 ctaacctgtg tccctaacgg ggcagctcg ggcacacaac aactaccaat caatggagtc 1500
 tttgtcttgg tttcatgggt gtccagattt tatcagttaa agcctgtggg aactgccagt 1560
 tcggcaagag gtaggcttgg tttgcgccga taa 1593

<210> 14

<211> 1641

<212> DNA

<213> Hu/NLV/Funabashi 258/1996/JP

<400> 14

atgatgatgg cgtctaagga cgccccctcaa agcgtgatg gcgcaagcgg cgcaggtcaa 60
 ctgggtgccg aggtaatac agctgacccc ttacccatgg aaccctggc tgggccaaca 120
 acagccgtag ccactgctgg gcaagttaat atgattgac cctggatgt taataatttt 180
 gtccagtcac cacaaggtga gtttacaatt tcccctaata ataccctgg tgatattttg 240
 ttgtatttac aattaggtcc acatctaaac cctttcttgt cacaictgtc ccaaatgtat 300
 aatggctggg ttgaaacat gagagttagg attctccttg ctgggaatgc attctcagct 360
 ggaaagattt tagtttgtt gtgtccccct ggctttacat ctctctct caccatagct 420
 caggtctacat tgttcccca tggattgct gatgtgagaa ccttgaacc aatagaaatg 480
 cccctcgagg atgtacgcaa tgtctctat cacaccaatg ataataacc aacaatgcgg 540
 ttgggtgtga tctgttacac gccgtctcgc actgggtggg ggtctggtta tctgtattct 600
 ttgttggttg ctggcagggt gctcacggcc cctagtagog acttcagttt cttgttcttt 660
 gtcccgccct ccatagaaca gaagactcgg gcttttactg tgcctaatat ccccttgcaa 720
 acctgtcca attctaggtt tcttccctc atccagggga tgattctgtc tctgacgca 780
 tctcaagtgg tccaattcca aaatggacgt tgcctcatag atggicaact cctaggcact 840
 acaccgcta catcaggaca gctgttcaga gtaaggaggaa agataaatca gggagcccg 900
 acgtcaacc tcacagaggt ggalggcaaa ccatcatgg catttgattc cctgcacct 960
 gtggggttcc ccgattttgg aaaatgtgat tggcacatga gaatcagcaa aaccccaaat 1020
 aacacaagct caggtagacc catgcgcagt gtcagcgtgc aaaccaatgt gcagggtttt 1080
 gtgccacacc taggaagtat acagtttgat gaagtgttca accacccac aggtgactac 1140
 attggcacca ttgaatggat ttcccagcca tctacacccc ctggaacaga tattaatctg 1200
 tgggagattc ccgattatgg atcatccctt tccaagcag claatctggc cccccagta 1260
 tccccctctg gatttggta ggctctgttg tactttgttt ctgcttttcc aggccccaac 1320
 aaccgtcag ccccgaaatga tgaacttgt ctctccctc aagagtacat aaccactttt 1380
 gtcagtgaac aagccccaac gatgggtgac gcagcttgc tgcattatgt cgacctgat 1440
 accaacagaa accttgggga gtcaagcta taccctggag gttacctac ctgtgtacca 1500
 aacgggttgg gtgccgggccc tcaacagctt cctcttaatg gtgtcttct cttgtctct 1560
 tgggtgtctc gttttatca gctcaagcct gtgggaacag ccaglacggc aagaagtagg 1620

cttggagatgc gccgtatata a

1641

<210> 15

<211> 1635

<212> DNA

<213> Hu/NLV/Chiba 407/1987/JP

<400> 15

atgatgatgg cgtctaagga cgctacacca agcgcagatg gcgccactgg cgccggccag 60
ctggtaaccg aggttaatac agctgacccc atacctattg accctgtggc tggctcctct 120
acagcccttg ccacagcagg ccaggtaaat ttgatigatc cctggalaat caataatitt 180
gtgcaagccc cccagggcga gttcacaata tccccaaata atacccccgg tgaatgtctt 240
tttgatttgc aattaggacc ccatittaaat cctttccttt cccacctttc tcagatgtat 300
aatggttggg tgggcaacat gcgagtgctg gtigcttggc ctggtaatgc tttacggct 360
gggaaggtta taatttgttg tgcctccctt gggttccaat ctgcaccct ttctatagcc 420
caggctactt ttttcccca tgaattgctt gatgttagga ccttgaccc ttagaagtg 480
ccccitgaag atgttaggaa tgtgttgtat cataataatg acaccaacc caccatgcgc 540
ctcctttgca tgttgtacac tctctccgc accgggggag cgtctggtgg gactgattct 600
tttgtgtggc ctggcggtg actcacttgt ccgggccctg actttaactt cttattccta 660
gtccctccca cagtcagca aaagaccgc ccttttactg tgcctaata cctttgaag 720
tacctgtcta attccaggat cccaaatcct attgaaggta tgcattgic acctgaccag 780
acccaaaatg ttcaattcca gaatggtagg tgtacaattg acggtcaacc ccttgggacc 840
acacctgtct cagttatgca gttatgtaag tttaggggta ggattatc tggacagaga 900
gtgtcaact tgacagagtt ggaatgttca ccttttaagg cctttccgc cccgccccct 960
gcgggcttgc cagatcttgg gtctgtgat tggcatattg aaatagtaa aatcccaaat 1020
tccagacccc agaacaacc aatagtgacc aattctgca aaccaatag tcaacagttt 1080
gtccacact tgtcaagtat cacccttgat gaaaatgtt ccagtggagg tgactatatt 1140
ggcactatac aatggacctc acctccttct gattctggcg ggccaatac aaatttttgg 1200
aaaatccctg actatgggtc cagcctagca gaagcttcac aactggcccc cgctgtctat 1260
ccacctgggt tcaatgaggt gatgtgtat ttatggcat ctataacctg tcccaatcag 1320
tctgggtctc ctaatttagt gccatgccg ctccccagg aatatatac acactttatt 1380
agttagcagg ccccatcca ggttaggct gccttactc actatgtaga cccagacacc 1440
aatcgcaatt tgggtgagtt caaattatct cctgggtgtt atttaacctg ttttctaatt 1500
agttctagta ctggacctca acaacttctt ctgtatgtg tatttgtctt tgcctcttgg 1560
gtttctagat ttatcaatt aaagcctgtg ggaacagccg gaccggctag aggtaggctt 1620
ggtgtccgta gataa 1635

<210> 16

<211> 1620

<212> DNA

<213> Hu/NLV/Narita 104/1997/JP

<400> 16

atgaagaatg cgtcgaatga cgccaaccca tctgatgggt ccacagccaa cctcgtccca 60

gaggtcaaca atgaggttat ggctttggag cccgtttgtg gtgccgctat tgcggcacct 120
 gtacggggcc aacaaaatgt aattgacccc tggattagaa ataattttgt acaagcccct 180
 ggtggagagt ttacagiatc ccttagaaac gctccgggtg agatattatg gagcgcgccc 240
 tggggccctg atttgaaccc ctacctttct catttggcca gaatgtacaa tggttatgca 300
 ggtggttttg aagtcaggtt aatcctcgcg gggaacgcgt tcaccgccgg gaaaalcata 360
 ttgacagcag tcccacaaa ttttccaact gaaggcttga gcccagcca ggttactatg 420
 tcccccata taalagtaga tgttaggcaa tiggaaacctg tattgatccc ctacctgat 480
 gttaggaata acttctatca ttacaatcaa tcaaatgatt ctaccattaa attagatgca 540
 atgctgtata caccacttag ggctaataat gctggggatg atgtcttcac agtctcttgt 600
 cgagtcctca cgaggccatc ccccgatitt gatttcatat tcttgggtcc acccacagtt 660
 gaatcaagaa ctaaaaccatt caccgtccca atcttaactg ttgaggaaat gtctaactca 720
 agattcccca ttccttttga aaagtgttac acgggtccca gcagtgtctt tgttgtccaa 780
 ccacaaaatg gcagggtcac gactgatggc gtgctcttag gcactacca gctgtctgt 840
 gtcaacatct gcaccttcag aggggatgtc acccacattg caggcagtca tgactatata 900
 atgaatttgg ctcttcaaaa ttggagcaat tatgaccaa cagaagaaat cccagcccct 960
 ctgggaactc cagatttctg gggaaagatc caaggcatgc tcacccaaac cacaagagag 1020
 gatggctcga cccgcgcccc caaagctaca gtgagcactg ggagtgtcca ctttactcca 1080
 aagctgggca ggttcaata caccactgac acaacaatg attttcaac tggccaaaac 1140
 acgaaattca cccagtcggc cgtcatccag gacggtaata atcatcaaaa tgaaccccaa 1200
 caatgggtgc tcccaaatia ctacagtaga actggtcata atgtgcacct agctcctgcc 1260
 gttgccccca ctttcccggtg tgagcaactt cttttcttta ggtccactat gcccggaigt 1320
 agcgggtatc ctaacatgaa tctggattgc ctactcccc aggaatgggt gcaacacttc 1380
 tgccaagaag cagctccagc acaatctgat gggctctgct tgagatttgt gaatccagac 1440
 acaggtaggg ttttgtttga gtgcaagctc cataaatcag gctatgtcac agtggctcac 1500
 actggccgcg atgatttggg tatccccccc aatggttact ttgatttga ctcttgggtc 1560
 aaccagttct acacacttgc ccccatggga aatggagcgg ggccgaggcg tgcattataa 1620

<210> 17

<211> 1647

<212> DNA

<213> Hu/NLV/Sanbu 809/1998/JP

<400> 17

atgaagatgg cgtcgaatga cgtctctcca tctaatgatg gtgccgcccg cctcgtccca 60
 gagatcaaca atgaggcaat ggcgctagac ccagtggcgg gtgcagcgal agcagcgcgc 120
 ctacttggtc agcaaaacat aattgatccc tggattatga ataattttgt gcaagcacct 180
 ggtggttagt ttacagtgtc ccttaggaat tccccgggtg aagtgttctt taatttggaa 240
 tggggcccag aaalaaaccc ttatttggcc catcttgcta gaatgtataa tggttatgca 300
 ggtggatttg aagtcaggtt ggtcctggct gggaatgcgt tcacagcagg aaagataatc 360
 ttgacagcta tccccctaa ttttcaatt gataatctga gcgcagcaca aatcactatg 420
 tggccgcatg tgatttggga tgtcagacag ttggaaccgg tcaaccttcc gatgcttgac 480
 gttcgcaaca atttctttca ttacaatcaa gggctcgtat cgcgattgcg ctttaattgca 540
 atgctgtata cactcttag ggcaataat tctggagaig atgttttcac tgtgtcttgt 600
 agagtactga ctaggctag ccttgatitt tcatccaatt tcttgttccc acccacgtg 660
 gaatcaagaa caaaacctt taccctccct attctgacta tctctgaat gtccaattct 720

aggtttccag tgcgattga gtccttgcac accagcccaa ctgagaatat tgttgtccag 780
 tgccaaaatg ggcgctcac tctcgatgg gagtcatgg gcaccacca actcttaccg 840
 agtcaaatit gtccttttag gggcgctc accagatcaa caagcagggc cagtcatcag 900
 gccgalacag caaccctag gctgttlaat taitattggc atgtacaatt ggataatcta 960
 aatgggaccc ctatgatcc tgcagaagac ataccaggcc ccttagggac accagacttc 1020
 cggggcaagg tcttggcgt ggccagccag agaaacctcg acagcacaac tagagcacat 1080
 gaagcaaaag tggacacaac agctggcgt ttcaccccaa agtgggctc attagaaata 1140
 tctactgatt ccgatgactt tgacaaaac cagccaacaa agttcaccac agttggcatt 1200
 ggggttgaca atgaggcaga atttcagcaa tggcttttac ccgactatc tggtcagttc 1260
 acccacaaca tgaacctggc cccagctgtt gctcccaact tccctgttga gcagctcctt 1320
 ttcttccgct cacagtacc atcttctgtt gggcgatcca acggggtcct agactgtctg 1380
 gtcccccagg aatgggtcca acacttctac caggaatcgg cccccgcca aacacaagtg 1440
 gccctggita ggtatgtcaa ccttgacact ggtaaagtgc tatttgaggc caagctgat 1500
 aaattaggtt ttatgactat agctaacaat ggtgattctc caataactgt tcccccaat 1560
 ggatatttta ggttgaatc ttgggtgaac ccttttata cacttgcccc catgggaact 1620
 gggaacgggc glagaaggat tcaataa 1647

<210> 18

<211> 1623

<212> DNA

<213> Hu/NLV/Ichikawa 754/1998/JP

<400> 18

atgaagaagg cgtcgaatga cgctactcca tctaattgat gtcggccgg cctcgtgcca 60
 gaaagtaaca atgaggcaat ggctctggaa cccgtgtgtg gggcgcttt agccgcccc 120
 gtcactggcc aaactaatat aatagacccc tggattagaa ctattttgt ccaagcccc 180
 aatggtgaat ttacagtctt ccttagaaat tccctggag agatattgt caatttgag 240
 ttgggtccag aactgaaccc ttatctggca catttagcta ggtatgaca tggttatgc 300
 ggtggtatgg aggtgcaagt gatgctcgg ggaacgcgt tcaactgttg caagatcatc 360
 tttgccgccc tgccacctta ctttccagtg gaaaatctt gcccttcca aataacaatg 420
 ttcccatatg tgatcatga tgcagaacc ttggaacctg tattactccc aatgcctgat 480
 gtcagaagca cctttttcca ctttaalcaa aaagatgagc ctatgatgag acttgttgcc 540
 atgctttaca cccccctcg ttctaattgt tctgtgacg acgttttcac cgtctcatgt 600
 aggalccica ctaggccctc ccttgaattt gattttacat atttggtgcc accaacagta 660
 gaatcaaaga ctatgccatt cactactact gtgtgacac tgggagaact gtccaactct 720
 agattccctc tctctattga tgaaaggct accagcccaa atgagtcct agttgttcag 780
 ccacagaatg ttagggctac actagatggg gagctgttag gcacaacca actgcaagca 840
 tgcaacattt gctccataag ggggaaggta acagggcagg tccctagtga acaacacatg 900
 tggaaacctg agatcacaaa cctaaatgg acgcaattg accctacaga tgatgtccca 960
 gcccccttg gltgtcccga ctttgcaggt gaggtctttg gltactcag ccagagaaat 1020
 agaggtgaaa gcaaccacg aaacagggt calgacgtg tctgtgtac ctacagtac 1080
 aagtacacc ctatctagg ctatgtgcaa attggaactt ggaacaccaa tgatgtgaa 1140
 aaccagccaa caaaattcac cccatgggt ttgaatgagg tgcctaagg ccatcgattt 1200
 gaacagtga cttgcctag gtattcgggt gccctgacat taaatatgaa tttagccct 1260
 gctgtggccc cgtctttcc tggagagcgt ctccttttct tccgtctta tgtccattta 1320

<213> Hu/NLV/Kashiwa 47/1997/JP

<400> 20

atgaagatgg cgtcgaatga cgccgctcca tcaaatgatg gtcagctag tctcgtacca 60
gagggcatta atgagactat gccattggaa cccgttgcig gcgcatctat tgcigcccca 120
gtggcgggac aaaccaacat aatlgacccc tggataagaa caaatltgt acaagccccc 180
aatggagagt ttacagtgtc accaagaaat tcccctggag aaattttatt aaatttagaa 240
ttaggaccag atctgaatcc ttatttggcc catctttcaa gaatgtacaa tggttatgct 300
ggaggigtig aggtgcaagt gctccttgcg gggaacgcgt tcacagcagg taagatatg 360
tttgcagcaa tcccacctaa ctltctcgtg gatatgatta gccagctca aattactatg 420
cttccccatt tgattgtaga tgttaggact ttggaacctt ttatgacacc ctgtcctgat 480
gttaggaatg tgttctatca ttttaataat caacctcaac ctagaatgag gttagtggct 540
atgctctaca ccccatlgag gtctaattgt tcaggagatg atgtcttcac tgtgtcttgt 600
agagtactaa ctaggccaac tccigtattt gaattttatt acctggigcc ccttctctga 660
gagtcacaaa cttaaacatt cacactacca atattaacca tttctgaatt gaccaactcc 720
cggttcccca ttccaatcga gcaattgtat acggctccaa atgaaaccaa tgtgtccag 780
tgtcagaatg gcagggtcac cttagatgga gagctccagg gcacaacca gctgttatca 840
agtgcagttt gcttcttaca gggcaggact gtggctgata atggggataa ttgggacca 900
aatltgtctc agctgacctt tccaaatgtt gcaagctatg acccactga tgaagtcca 960
gcaccatigg gcactcagga ttttagtggg atgttgtatg gagtgttgac ccaggacaat 1020
gtgaatgtga gcacaggaga ggccaaaaat gctaaggga tatacatatc caccactagt 1080
ggaaaattca ccccaaaaat tgggtcaatt ggattgcatt caataactga gcatgtgcac 1140
cccaaccaac agtcgcggtt caccctcgic ggagtcgccc tggatgagaa caccctctc 1200
cagcaatggg ttctgccaca ttatgcaggt agtctcgctc tcaacaccaa ttggcacct 1260
gctgttggcc cgacttctcc tggtagcga ttgtgttct tcaggctccg tgtcccatgt 1320
gttcaaggcc tacagggaca ggaatgcgtt atagattgcc tctgcccga agagtgggtg 1380
aatcattttt accaagaggc agcccttcc caagcagacg ttgcccttat taggtatgtc 1440
aaccttgata cgggtgcgac gctgtttgaa gccaaattgc atagatcagg ttttattact 1500
gtgtcacata ctggtgctta cctcttctga gtcccccaa atggtcattt caggtttgat 1560
tcttgggtta atcaatttta ctactcgcc ccatgggaa ctggcaatgg gcgtagaaga 1620
attcagtaa 1629

<210> 21

<211> 1653

<212> DNA

<213> Hu/NLV/Mie 7k/1994/JP

<400> 21

atgaagatgg cgtcgaatga cgctgctcca tcaaatgatg gtcgtgcca cctcgtacca 60
gaggccaacg atgaggttat ggcattgaa cccgttgggg gagcctcaat tgcagctcct 120
gttgtcggcc agcaaaatat aatlgacccc tggattagag aaaaatttgt ccaagcaca 180
caaggtagat tcactgtttc accaaggaat tggcctggcg agatgctctt aaaccttgag 240
ttgggccag aacttaatcc ctatllaagt catltgtccc gcatgtacaa cggatatgct 300
gggtggcatgc aggttcaggt ggtccttagct gggaatgcgt tcacagctgg gaaaatcatt 360
tttgcgcgag tggccaccaca tttccctgta gaaaacatca gtgcagcca aataactatg 420

tgcctccatg tgattgtga tglgagacaa ctigaaccag tgcctcgcg cctccctgat 480
 ataaggaata ggctcttcca ctacaaccag gagaacaccc cccggatgag gcttgttagc 540
 atgctctata caccctaaag ggctaaactt ggtgaggatg taitcactgt gtcctgcagg 600
 gtctgcactc gccccgcccc agattttgag ttacacattt tagttccacc aactgttgaa 660
 tcaaaaacaa aaccttttac ttacctaacc ttgactcttg gcgagttgtc taattctcgc 720
 ttcccggtcg ctatagatat gctttatact gacctaatg aalcaatagt tgtacaaccc 780
 caaaatggta ggtgcacctt tgatggtaca ttgcaaggca caacacaatt ggttccaca 840
 cagatctgtg cttttagagg caccctgacg agccagaccg cgagagcggc cgattcaaca 900
 gatccccccc agagagcccc taatcatcca ctgcacgtcc aagttaagaa cctagacggt 960
 acacaatatg acccaacgga cgatatacct gcagtccttg gggctattga cttcaagggt 1020
 acagcttttg gattggctag tcagagggat gtttctggac aacaagaaca gggccactat 1080
 gccaccgag cccatgaagc acacatcgac acaactgac caaagtatgc acccaatta 1140
 ggcaacaatt tcattaaatc tggttctgat gatttcaata caaaccagcc cattagattc 1200
 actccgggtg gcattgggtg caacaattgg agacaatggg aattgcccga ctatcttgcc 1260
 agattaacct taaatatgaa ccttgctcct gctgtttctc catcttccc tgggtgaacg 1320
 atccttttct tcaggiccat agtaccatca gccggaggct acgggtcttg ctacatagac 1380
 tctctcatac cccaggaatg ggtgcagcac tttaccagg aagcagcacc ttcaaatct 1440
 gctgttcac tggttaggta tglcaacccc gatactgggc gtaacatctt tggggccaaa 1500
 ctgcacagag aagggttctt caccgtggcc aactgtggaa acaatcctat ttagtcccc 1560
 cccaatggct atttcagatt ttaggtcttg ggtaatcagt ttatacact tgcctccatg 1620
 gcatctggac aggggcgtag aagggccag taa 1653

<210> 22

<211> 1626

<212> DNA

<213> Hu/NLV/Osaka 10-25/1999/JP

<400> 22

atgaagatgg cgtcgaatga cgcagctcca tctagtgatg gtgcagcagg cctcgtacca 60
 gagatcaaca atgaggatcat gccccitgaa cccgtggctg gtgcacgct ggcgacacca 120
 gtctcgggc acaaaaatat aattgatccc tggataagaa ataattttgt gcaggctcct 180
 gcaggatgag ttactgttcc ccttaggaat tccccggag aaattttgct tgatttgaa 240
 ttgggaccag atttgaatcc ctacctagcc catctggccc gcattataa tgggcacgct 300
 ggccgcatgg aagtgcacaa ttgtctggct gggaatgcgt tcacagcagg caaaatcata 360
 ttgtctgcca tccccccagg gtccccatat gaaaatttgc cacttctca aattacaatg 420
 tgcacacatg ttataatga tgttaggcaa ttggagccat tcttttggc tatgccagac 480
 atttggaaata atttcttcca ttataatcag ggcaatgac caaaatgag gctagtgtct 540
 atgctctata ctcttttgag ggctaataat tctggtgatg atgtgttcac agtttcttgt 600
 aggggtgctc caaaaccttc acccgacttt gaattcacat ttctagttcc cccacagtc 660
 gagtctaaga ctaagcaatt cgtctgccc attctcaaaa tatcagagat gactaattca 720
 agattcccag taccagtgga tgtgatgtac acggccagga acgagaacca ggtcgtccaa 780
 ccacagaatg gcagggtcac aclegacggt gaactgttgg gcaccacccc cctgttggct 840
 gtaaacatct gtaaatltaa gggagaagtc atagccaaaa atggggacgt gagatcciat 900
 agaattggata tggaaatcac taacatgat ggaacaccta ttgacccac agaggacaca 960
 cctgttccca ttggtcacc agatttctag ggcatatctt ttggcgttgc cagtacgcgc 1020

aataagaatg agcaaaaccc cgccacgagg gctcatgaag ccataaltaa cactggaggga 1080
gaccatttat gcccccaaat tagctcaagt gaaatttatc tcacaagtc caacattttg 1140
aggtgcacca acccacaacc ttaccaccag tcgggggtgc gggggacaat tctcatccgt 1200
tcagacaatg gacactgcc cgaatgggtg ggcacctcac caacaacacc cactgggcc 1260
cagcagtggc gccgcgttc ccgggggagc aattgctgtt cttcagggtca cagatacca 1320
gttccgggtg tcatgaatcg cgttacatgg atgtcttgt cccacaagag tgggttcagc 1380
acttctacca ggaagctgcc acagctcaat ctgagggtgc cctcalaag attcatcaac 1440
ccagacactg gtagggctct tttttaggct aggctacata agcaaggctt cataactgtg 1500
gctcataccg gtgacaaccc aattgtcatg ccaccaaalg ggtatttcag gtttgaagct 1560
tgggtcaatc agttttattc acttgcccc gtgggaactg ggaaaggcg tagaagggtc 1620
caataa 1626

<210>23
<211>21
<212>DNA
<213>Artificial Sequence

<400>23
aatgatgatg gcgtctaagg a 21

<210>24
<211>33
<212>DNA
<213>Artificial Sequence

<400>24
tttttttttt tttttttttt tttttttttt ttt 33

<210>25
<211>24
<212>DNA
<213>Artificial Sequence

<400>25
gccattatcg gcgcaracca agcc 24

<210>26
<211>20
<212>DNA
<213>Artificial Sequence

<400>26

tgacctcgga ttgtggacag 20

<210>27

<211>31

<212>DNA

<213>Artificial Sequence

<400>27

gcgaattctt atctacggac accaagccta c 31

<210>28

<211>20

<212>DNA

<213>Artificial Sequence

<400>28

gtgaatgaag atggcgtcga 20

<210>29

<211>23

<212>DNA

<213>Artificial Sequence

<400>29

ccattataat gcacgcctgc gcc 23

<210>30

<211>22

<212>DNA

<213>Artificial Sequence

<400>30

ttgtgaatga agatggcgtc ga 22

<210>31

<211>24

<212>DNA

<213>Artificial Sequence

<400>31

aattattgaa tccttctacg cccg 24

6649353

<210>32

<211>28

<212>DNA

<213>Artificial Sequence

<400>32

aattactgaa cccttctacg cccatttc 28

<210>33

<211>23

<212>DNA

<213>Artificial Sequence

<400>33

ccataactga acccttctac gcc 23

<210>34

<211>24

<212>DNA

<213>Artificial Sequence

<400>34

atgaagatgg cgtcgaatga cg 22